



Fertile adult plant with no trunk



Matte upper-surface of frond



Pale brown stipe scales



Sori with no indusia

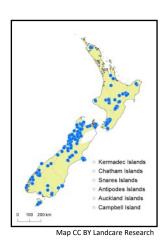
# Cyathea colensoi

### Alsophila colensoi mountain tree fern

Endemic to New Zealand.

Distinguished by its lack of a trunk and lack of indusia. A trunk-less, scaly tree fern with sori will almost certainly be Cyathea colensoi. Its matte fronds and pale brown scales also aid identification.

Grows in colder forest, especially at higher elevations.





Crown with pale scales and thick green or brown stipes

# Cyathea cooperi

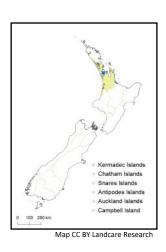
### Sphaeropteris cooperi

Naturalised in New Zealand. Indigenous to Australia.

Distinguished by its pale scales, lack of indusia, and large, arching fronds with green or brown stipes.

Increasingly weedy, at least around Auckland.

Compare with C. medullaris.





Narrow black stipes



Stipe with rough base, among brown scales



Scales brown rather than blackish



Sori with hood-shaped indusia

# Cyathea cunninghamii

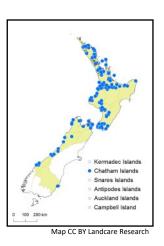
## Alsophila cunninghamii pūnui, slender tree fern

Indigenous to New Zealand and Australia.

Distinguished by its slender, blackish stipes with rough bases, brown scales, and hood-shaped indusia. Plants to c. 2 m tall can have a weakly-developed skirt of dead stipes, and can be difficult to separate from juvenile *C. smithii* without using microscopic characters—see eFloraNZ.

Grows mostly in wetter forests, often near waterways.

Compare with C. medullaris and C. smithii.





Trunk with peg-like remains of stipe bases



Frond with white underside



Glossy upper-surface of frond



Stipe base white, warty, and scaly



Sori in cup-like indusia; curly hairs on frond axes

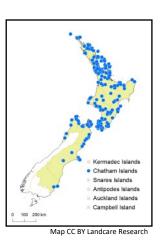
# Cyathea dealbata

Alsophila tricolor ponga, silver fern

Endemic to New Zealand.

Distinguished by the white undersides of its fronds, the white bloom on its stipes, curly hairs among its scales, and cup-shaped indusia. The white colouring only develops in older plants (fronds > c. 1 m), and is less pronounced in northern plants (which have silver or greygreen frond undersides).

Grows mostly in warmer, drier forest and scrub.





Large, arching fronds



Thick black stipes; trunk with hexagonal scars



Stipe with smooth base, with dark-brown scales



Scales with marginal spines



Sori enclosed in indusia that rupture irregularly

# Cyathea medullaris

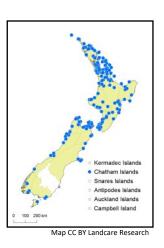
### Sphaeropteris medullaris mamaku

Indigenous to New Zealand and some Pacific Islands.

Distinguished by its thick, black stipes with smooth bases and darkbrown scales, large fronds, trunks with hexagonal stipe scars, scales with marginal spines, and irregularly-rupturing spherical indusia.

Grows mostly in warmer, wetter forests, usually at lower elevations, where it can be abundant on slips and other disturbed areas.

Compare with C. cunninghamii.





Skirt of dead frond stipes



Orange-brown scales



Sori with saucer-shaped indusia

## Cyathea smithii

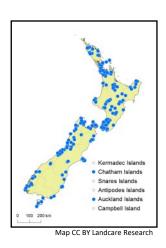
Alsophila smithii kātote, Smith's tree fern

Endemic to New Zealand.

Distinguished by its skirt of dead stipes, orange-brown scales, and saucer-shaped indusia. Plants to c. 2 m tall can have only a weakly-developed skirt, and can be difficult to separate from juvenile *C. cunninghamii*—see eFloraNZ.

Grows mostly in colder forests, especially at higher elevations.

Compare with C. colensoi, C. cunninghamii, and Dicksonia fibrosa.





Trunk thick, with skirt of dead fronds



Fronds widest near their apex



Stipes short and greenish, and hairy at base



Rachis with fertile pinnae; sori at pinna margins

# Dicksonia fibrosa

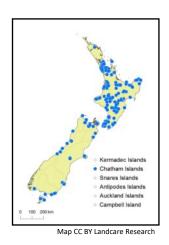
## whekī-ponga

Endemic to New Zealand.

Distinguished by its skirt of dead fronds, its stipes that are short, greenish or orange-brown, and hairy, and its trunk which can become very wide.

Grows mostly in colder forest.

Compare with Cyathea smithii.







Two shortly-trunked plants



Long, mostly orange-brown or grey stipes



Hairs on underside of frond not in tufts



Sori at pinna margins

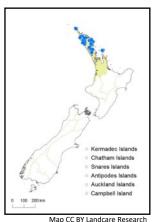
# Dicksonia lanata subsp. hispida

#### tūākura, stumpy tree fern

Endemic to New Zealand.

Distinguished by its short trunk (to c. 2 m tall), its long and mostly orange-brown or grey stipes, and the covering of fine hairs on the undersides of its frond axes.

Grows mostly in kauri forest.



Map CC BY Landcare Research



Trunkless plants growing in colony on hillside



Stipes long and orange-brown



Tufts of orange hairs on underside of frond



Sori at pinna margins

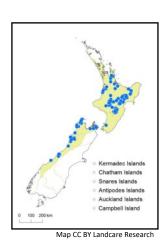
## Dicksonia lanata subsp. lanata

### tūākura, creeping tree fern

Endemic to New Zealand.

Distinguished by its lack of a trunk, its long and mostly orange-brown stipes, and the tufts of hairs at the costa junctions on the undersides of its fronds.

Grows mostly in colder forests, often at middle or higher elevations. It is often on hillsides where it can form extensive colonies.





Blackish stipes



Growing in grove; with many orange-brown dead fronds



Bristly hairs on axis undersides; sori on pinna margins



Stipes dark brown, with brown hairs



Buds on trunk

## Dicksonia squarrosa

#### whekī

Endemic to New Zealand.

Distinguished by its black or dark brown stipes with many, long, brown hairs, and the brown bristly hairs on the undersides of the axes. The orange-brown dead fronds are also characteristic. This is the only New Zealand tree fern that regularly re-sprouts from buds on the trunk.

Widespread in forests, particularly on wetter ground. Often grows in groves.

